

REMARKS

In accordance with the foregoing, the specification, FIGS. 1, 2, 12, and 17, and claims 1-10, 12, and 17-26 have been amended, and new claim 28 has been added. Claims 1-28 are pending, with claims 1, 19, and 23 being independent. No new matter is presented in this Amendment After Final Rejection.

The Finality of the Final Office Action of March 13, 2008, Is Premature

In paragraphs 11 and 12 on pages 4 and 5 of the Final Office Action of March 13, 2008, the Examiner has relied on the newly cited Goodman and *American Heritage College Dictionary* references to support the rejection of claims 1-14, 19-22, and 25-27 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz, and the rejection of claims 15-18 under 35 USC 103(a) as being unpatentable over Landsman view of Klug, stating that "[a]dditionally, Goodman [see PTO-892 with this Office Action] teaches JavaScript files are markup documents [p. 17 ¶ 3]," and "[s]ee definition of 'interactive' in dictionary cited on PTO-892 with this Office Action."

MPEP 706.02(j) provides as follows:

Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch*, 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970).

Accordingly, it is submitted that the Examiner was required to include the Goodman and *American Heritage College Dictionary* references in the statements of the rejection of claims 1-14, 19-22, and 25-27 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz, and the rejection of claims 15-18 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as applied to claim 2 and further in view of Klug. Furthermore, it is submitted doing so would constitute new grounds of rejection pursuant to the following guidelines set forth in MPEP 1207.03(III):

A new prior art reference applied or cited for the first time in an examiner's answer generally will constitute a new ground of rejection. If the citation of a new prior art reference is necessary to support a rejection, it must be included in the statement of

rejection, which would be considered to introduce a new ground of rejection. Even if the prior art reference is cited to support the rejection in a minor capacity, it should be positively included in the statement of rejection. *In re Hoch*, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n. 3 (CCPA 1970).

Here, it is submitted that the Examiner's reliance on the Goodman and *American Heritage College Dictionary* references to support the rejection of claims 1-14, 19-22, and 25-27 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz, and the rejection of claims 15-18 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as applied to claim 2 and further in view of Klug, clearly constitutes new grounds of rejection under the above guidelines set forth in MPEP 706.02(j) and 1207.03(III).

Although claims 25-27 were newly added in the Amendment of September 5, 2007, claims 1-22 were not amended in the Amendment of September 5, 2007, such that the new ground of rejection of claims 1-14 and 19-22 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as supported by the newly cited Goodman and *American Heritage College Dictionary* references, and the new ground of rejection of claims 15-18 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as applied to claim 2 and further in view of Klug as supported by the newly cited Goodman and *American Heritage College Dictionary* references, were not necessitated by the Amendment of September 5, 2007.

Accordingly, for at least the foregoing reasons, pursuant to MPEP 706.07(c), it is submitted that the finality of the Final Office Action of March 13, 2008, is premature pursuant to MPEP 706.07(a), and pursuant to MPEP 706.07(d), it is respectfully requested that the finality of the Final Office Action of March 13, 2008, be withdrawn, and that this Amendment After Final Rejection be entered.

Applicants' Statement of Substance of Interview

The Interview Summary mailed on April 7, 2008, for the telephone interview conducted on March 31, 2008, between Examiner Nathan E. Price and the undersigned attorney is acknowledged. The applicants' statement of the substance of the interview required by MPEP 713.04 is as follows.

The Examiner states as follows in the Interview Summary:

The rejections of claims 19-22 under 35 USC 101 and 112, second paragraph, were discussed. Examiner's position is that the recited limitations of the body of the claims can be implemented in software alone and that there is no recited structure. Therefore, the preamble, which recites "apparatus", is inconsistent with the body which recites elements that can be implemented in software alone, even if the recited elements are not required to be software in all embodiments.

The attorney confirms that the Examiner's statement is accurate. Furthermore, during the interview, the attorney asked the Examiner to identify some legal basis in the statutes, rules, MPEP, or case law for the rejections under 35 USC 101 and 112, second paragraph. The Examiner was not able to do so, but said that he had been instructed to make the rejections by one of the TQASes (Training Quality Assurance Specialists) in Technology Center 2100. The Examiner said that he would ask one of the TQASes to identify a legal basis for the rejections, and would call the attorney back. The Examiner called the attorney back later that same day, and said that he had spoken with TQAS Gail O. Hayes, but that she was not able to identify a specific basis in the statutes, rules, MPEP, or case law for the rejections, but had confirmed that the rejections were nevertheless correct.

Request for Consideration of Information Disclosure Statement

An Information Disclosure Statement was filed on March 26, 2008, and it is respectfully requested that the Information Disclosure Statement be considered.

Drawing Objections and Drawing and Specification Amendments

FIGS. 1, 2, and 12 have been objected to as failing to conform to 37 CFR 1.84(p)(1) and 37 CFR 1.84(q), and FIGS. 2 and 12 have been objected to as failing to conform to 37 CFR 1.84(p)(3), because of the specific deficiencies identified in paragraph 3 on page 2 of the Final Office Action of March 13, 2008. Accordingly, FIGS. 1, 2, and 12 have been amended to correct the deficiencies identified by the Examiner, and paragraphs [0007] and [0068] of the specification have been amended to be consistent with the changes made to FIGS. 1, 2, and 12. Accordingly, it is respectfully requested that the objection to the drawings be withdrawn.

Although FIG. 17 was not objected to, FIG. 17 has also been amended to comply with 37 CFR 1.84(p)(1) and 37 CFR 1.84(q) by eliminating deficiencies similar to those identified by Examiner with respect to FIG. 1.

Double Patenting Rejections

Amending the Claims or Filing a Terminal Disclaimer Would Be Premature

The Examiner has set forth five obviousness-type double patenting rejections in which the Examiner has provisionally rejected claim 1 of the present application over various claims of copending Application Nos. 10/685,694, 10/685,696, 10/685,697, 10/685,699, and 10/686,537. As indicated by the Examiner, these provisional rejections can be overcome by filing a terminal disclaimer. However, as recognized by the Examiner, the claims of the five copending applications relied on by the Examiner have not in fact been patented. In light of this, it is submitted that it would be premature for the applicants to amend the claims of the present application or file a terminal disclaimer in response to the provisional rejections because it is impossible to know at this time whether the claims of the five copending applications relied on by the Examiner will ever be patented. Accordingly, it is respectfully requested that the provisional obviousness-type double patenting rejections be held in abeyance until the five copending applications have issued as patents.

The above arguments were also presented on page 10 of the Amendment of September 5, 2007. In response to the above arguments, the Examiner states as follows on page 2 of the Final Office Action of March 13, 2008:

Examiner acknowledges Applicant's comments regarding a terminal disclaimer, and the relevant rejections will be held in abeyance.

Rejection 1

Claim 1 has been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7-9 of copending Application No. 10/685,694. This rejection is respectfully traversed.

In explaining the rejection, the Examiner merely states that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because claims 7 – 9 of the copending application [Application No. 10/685,694] anticipate claim 1 of Application No. 10/686,521 [the present application]."

However, it is submitted that the Examiner's explanation of this rejection does not comply with the requirements of an obviousness-type double patenting rejection based on anticipation set forth in MPEP 804(II)(B)(1), which provides as follows on MPEP pages 800-21 and 800-22 (emphasis by underlining added):

Since the analysis employed in an obviousness-type double patenting determination parallels the guidelines for a 35 U.S.C. 103(a) rejection, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obvious-type double patenting analysis. These factual inquiries are summarized as follows:

- (A) Determine the scope and content of a patent claim relative to a claim in the application at issue;
- (B) Determine the differences between the scope and content of the patent claim as determined in (A) and the claim in the application at issue;
- (C) Determine the level of ordinary skill in the pertinent art; and
- (D) Evaluate any objective indicia of nonobviousness.

The conclusion of obviousness-type double patenting is made in light of these factual determinations. Any obviousness-type double patenting rejection should make clear:

(A) The differences between the inventions defined by the conflicting claims — a claim in the patent compared to a claim in the application; and

(B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent.

Here, the Examiner's explanation of this rejection does not make clear the differences between claims 7-9 of copending Application No. 10/685,694 and claim 1 of the present application, and the reasons why a person skilled in the art would conclude that the invention

defined in claim 1 of the present application is anticipated by the invention defined in claims 7-9 of copending Application No. 10/685,694 as required by MPEP 804(II)(B)(1). Accordingly, it is submitted that the Examiner has not established a *prima facie* case of obviousness-type double patenting with respect to this rejection.

Arguments similar to the above arguments were presented on pages 10-12 of the Amendment of September 5, 2007. In response to these arguments, the Examiner states as follows on page 3 of the Final Office Action of March 13, 2008:

Applicant's arguments regarding double patenting rejections have been fully considered but they are not persuasive. Applicant argues (for example, p. 11) the rejections fail to comply with requirements of MPEP 804(II)(B)(1). However, the cited portion of the MPEP applies to rejections not based on an anticipation rationale (MPEP 804(II)(B)(1) ¶12). Since the rejections are based on an anticipation rationale, this argument is not persuasive.

However, the cited portion of MPEP 804(II)(B)(1) does in fact apply to rejections that are based on an anticipation rationale because it specifically requires the Examiner to "make clear . . . [t]he reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent." Furthermore, since claims 7-9 of copending Application No. 10/685,694 are not identical to claim 1 of the present application, the cited portion of MPEP 804(II)(B)(1) requires the Examiner to identify the differences between the claims even though the rejection is based on an anticipation rationale.

In an attempt to clarify his position, the Examiner states as follows on page 3 of the Final Office Action of March 13, 2008:

With respect to the rejection involving applications 10/685,694, 10/685,696, 10/685,699 and 10/686,537, the feature Applicant appears to argue to not be anticipated is outputting buffering state in response to a report signal. Claims 7 – 9 of 10/685,694, claim 3 of 10/685,696, claim 9 of 10/685,699 and claim 4 of 10/686,537 recite APIs that perform functionality that anticipates outputting buffering state in response to a report signal as claimed in the current application.

However, the Examiner has not explained why he considers claims 7-9 of copending Application No. 10/685,694, claim 3 of copending Application No. 10/685,696, claim 9 of

copending Application No. 10/685,699, and claim 4 of copending Application No. 10/686,537 to anticipate at least "a report signal" as recited in claim 1 of the present application. Furthermore, the Examiner has still not made clear the differences between claims 7-9 of copending Application No. 10/685,694 and claim 1 of the present application as required by MPEP 804(II)(B)(1).

Furthermore, it is submitted that the rejection is moot in view of the amendments made to claim 1 of the present application in this Amendment After Final Rejection.

For at least the foregoing reasons, it is respectfully requested that the provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 7-9 of copending Application No. 10/685,694 be withdrawn.

Rejection 2

Claim 1 has been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/685,696. This rejection is respectfully traversed.

In explaining the rejection, the Examiner merely states that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because using the data storage medium of claim 3 of the copending application [Application No. 10/685,696] anticipates claim 1 of Application No. 10/686,521 [the present application]," and that "[u]sing the data storage medium requires an apparatus."

However, the Examiner's explanation of this rejection does not make clear the differences between claim 3 of copending Application No. 10/685,696 and claim 1 of the present application, and the reasons why a person of ordinary skill in the art would conclude that the invention defined in claim 1 of the present application is anticipated by claim 3 of copending Application No. 10/685,696. It is submitted that the Examiner's statement that "[u]sing the data storage medium requires an apparatus" does not satisfy this requirement. Accordingly, it is submitted that the Examiner has not established a *prima facie* case of obviousness-type double patenting with respect to this rejection pursuant to MPEP 804(II)(B)(1) discussed above.

Furthermore, it is submitted that the rejection is moot in view of the amendments made to claim 1 of the present application in this Amendment After Final Rejection.

For at least the foregoing reasons, it is respectfully requested that the provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 3 of copending Application No. 10/685,696 be withdrawn.

Rejection 3

Claim 1 has been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 10/685,697. This rejection is respectfully traversed.

In explaining the rejection, the Examiner merely states that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because using the data storage medium of claim 17 of the copending application [Application No. 10/685,697] anticipates claim 1 of Application No. 10/686,521 [the present application]," and that "[u]sing the data storage medium requires an apparatus."

As pointed out by the Examiner, this provisional rejection can be overcome by filing a terminal disclaimer. However, it is submitted that filing such a terminal disclaimer would be premature at this time, both for the reasons discussed above and for the reasons discussed in MPEP 804(I)(B)(1), which provides as follows on MPEP page 800-17:

If "provisional" ODP [obviousness-type double patenting] rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer. A terminal disclaimer must be required in the later-filed application before the ODP rejection can be withdrawn and the application permitted to issue. If both applications are filed on the same day, the examiner should determine which application claims the base invention and which application claims the improvement (added limitations). The ODP rejection in the base application can be withdrawn without a terminal disclaimer, while the ODP rejection in the improvement application cannot be withdrawn without a terminal disclaimer.

Here, there are other rejections remaining in the present application. Also, the present application and copending Application No. 10/685,697 were both filed on October 16, 2003, and the Examiner has not yet made a determination as to which application claims the base

invention and which application claims the improvement. It is noted that copending Application No. 10/685,697 was docketed to the Examiner of the present application on March 26, 2008, but had not yet been acted on as of the filing date of this Amendment After Final Rejection.

In any event, it is submitted that the rejection is moot in view of the amendments made to claim 1 of the present application in this Amendment After Final Rejection.

For at least the foregoing reasons, it is respectfully requested that the provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 10/685,697 be held in abeyance at least until the conditions set forth in MPEP 804(I)(B)(1) referred to above have been satisfied.

Rejection 4

Claim 1 has been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 9 of copending Application No. 10/685,699. This rejection is respectfully traversed.

In explaining the rejection, the Examiner merely states that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because using the data storage medium of claim 9 of the copending application [Application No. 10/685,699] anticipates claim 1 of Application No. 10/686,521 [the present application]," and that "[u]sing the data storage medium requires an apparatus."

However, the Examiner's explanation of this rejection does not make clear the differences between claim 9 of copending Application No. 10/685,699 and claim 1 of the present application, and the reasons why a person of ordinary skill in the art would conclude that the invention defined in claim 1 of the present application is anticipated by claim 9 of copending Application No. 10/685,699. It is submitted that the Examiner's statement that "[u]sing the data storage medium requires an apparatus" does not satisfy this requirement. Accordingly, it is submitted that the Examiner has not established a *prima facie* case of obviousness-type double patenting with respect to this rejection pursuant to MPEP 804(II)(B)(1) discussed above.

Furthermore, it is submitted that the rejection is moot in view of the amendments made to claim 1 of the present application in this Amendment After Final Rejection.

For at least the foregoing reasons, it is respectfully requested that the provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 5 of copending Application No. 10/685,699 be withdrawn.

Rejection 5

Claim 1 has been provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/686,537. This rejection is respectfully traversed.

In explaining the rejection, the Examiner merely states that "[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because using the data storage medium of claim 4 of the copending application [Application No. 10/686,537] anticipates the apparatus [of claim 1 of the present application]," and that "[u]sing the data storage medium requires an apparatus."

However, the Examiner's explanation of this rejection does not make clear the differences between claim 4 of copending Application No. 10/686,537 and claim 1 of the present application, and the reasons why a person of ordinary skill in the art would conclude that the invention defined in claim 1 of the present application is anticipated by claim 4 of copending Application No. 10/686,537. It is submitted that the Examiner's statement that "[u]sing the data storage medium requires an apparatus" does not satisfy this requirement. Accordingly, it is submitted that the Examiner has not established a *prima facie* case of obviousness-type double patenting with respect to this rejection pursuant to MPEP 804(II)(B)(1) discussed above.

Furthermore, it is submitted that the rejection is moot in view of the amendments made to claim 1 of the present application in this Amendment After Final Rejection.

For at least the foregoing reasons, it is respectfully requested that the provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 10/686,537 be withdrawn.

Claim Rejections Under 35 USC 112

Claims 19-24 have been rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicants regard as the invention. This rejection is respectfully traversed.

Claims 19-22

The Examiner states as follows on page 12 of the Final Office Action of March 13, 2008

Claims 19 – 22 recite an apparatus for controlling a buffer, but the apparatus does not appear to include the buffer. It appears that the elements of the apparatus, specifically the buffer manager, can be implemented in software alone. The claims do not appear to recite structural elements. Therefore, it is not clear that the claimed subject matter can be accurately described as an apparatus.

However, claims 19-22 explicitly recite an apparatus comprising a buffer manager, which is clearly a structural element. Assuming *arguendo* that the elements of apparatus claims 19-22, specifically the buffer manager, can be implemented in software alone as conjectured by the Examiner, the language of claims 19-22 does not limit the elements to such a software-only implementation, and it is submitted that the elements can also be implemented in hardware, or in a combination of hardware and software. Furthermore, even if the buffer manager were to be implemented in software alone, that software would be executed on a computer, microcontroller, or other type of processor, which would still be an apparatus as recited in claims 19-22.

Arguments similar to the above arguments were presented on pages 18 and 19 of the Amendment of September 5, 2007. In response to these arguments, the Examiner states as follows on page 3 of the Final Office Action of March 13, 2008:

Regarding the rejection of claims 19 – 22 under 35 U.S.C. 112, second paragraph, Applicant argues that the claims are not unclear because even if the recited elements of the apparatus can be implemented in software alone, the claim is not limited to software alone. Examiner's position remains that the recited elements of the apparatus can be implemented in software alone. In such embodiments, the structure of the apparatus is not clear, even if other embodiments do include a physical structure. Hardware to execute the software is not recited.

However, it is submitted that claims 19-22 do in fact recite hardware to execute the software-only implementation hypothesized by the Examiner—an apparatus, which is undeniably hardware.

It is noted that the Examiner has not identified anything whatsoever in the statutes, rules, MPEP, or case law to support his position that an apparatus claim that recites only elements that might arguably be implementable in either hardware or software is indefinite under 35 USC 112, second paragraph, because "it is not clear that the claimed subject matter can be accurately described as an apparatus." Should the Examiner be inclined to maintain this rejection in light of the above arguments, it is respectfully requested that the Examiner discuss this matter with his SPE, William Thomson, and identify some basis in the statutes, rules, MPEP, or case law for the rejection under 35 USC 112, second paragraph in the next Office Action, even if that Office Action is an Advisory Action.

Furthermore, should the Examiner and his SPE decide to maintain the rejection despite the arguments set forth above, it is respectfully requested that the Examiner provide an example of a structural element, other than the buffer, that might be recited in the body of independent claim 19 to overcome the rejection in the next Office Action, even if that Office Action is an Advisory Action.

For at least the foregoing reasons, it is submitted that the subject matter recited in claims 19-22 can in fact be accurately described as an apparatus, such that such that claims 19-22 are not indefinite under 35 USC 112, second paragraph, as alleged by the Examiner.

Claims 23 and 24

The Examiner states as follows on pages 12-14 of the Final Office Action of March 13, 2008:

Claims 23 – 24 recite the term "ENAV". The meaning of "ENAV" is not clearly defined. Therefore, the claims fail to clearly define the metes and bounds of the claimed subject matter. The term is indefinite because the specification does not clearly define the term.

Applicant appears to be relying on ENAV being an accepted term with an established definition in the related art. Applicant's response (received 10 December 2007) concedes that

the term is not defined in the foreign priority applications (p. 5 ¶1). However, documents cited by Examiner, as well as documents cited by Applicant, indicate that the features supported by ENAV were not clear to those of ordinary skill in the art around the time of Applicant's filing. For example, Taylor et al. (cited by Applicant in response received 19 December 2007) states that the ENAV specification neared completion in middle of 2003 (see ¶¶ quoted by Applicant on p. 6 of response received 19 December 2007). This is after some of Applicant's claimed foreign priority dates (the earliest of which is 17 October 2002). Additionally, Sharpless (cited by Applicant in response filed 19 December 2007), which was published 30 July 2003, after some of Applicant's claimed foreign priority dates, suggests that version 1.0 of the ENAV specification was not available at the time of publication (p. 22 last ¶).

Accordingly, it is not clear what metes and bounds are defined by the term in "ENAV" in the foreign priority documents or what definition should then be given to its use in the US application.

Examiner has been unable to obtain a copy of the ENAV specification or determine the date it became available to those of ordinary skill in the art. The requirement for information (mailed 19 October 2007) included a requirement for the ENAV specification (item (B(1)(a) and B(1)(b))). It is noted that Applicant's response (received 19 December 2007) indicated that these items were "...unknown to or is not readily available to the applicants and the assignee..." (p. 5 ¶3). Accordingly, the complete metes and bounds of the term "ENAV" appears to have been undefined and undisclosed at least at the time of Applicant's earliest claimed priority date.

For the purpose of examination, the term "ENAV" has been interpreted to mean any functionality related to presentation or reproduction of audio/video content, such as DVD, streaming video and web content.

However, it is submitted that the Examiner's comments about some of the foreign priority applications are irrelevant to whether claim 23 and 24 of the present U.S. application are indefinite under 35 USC 112, second paragraph. The Examiner is examining the U.S. application, not the foreign priority applications.

Furthermore, it is submitted that the Examiner has already recognized that the accepted meaning in the art of the term "ENAV" in claims 23 and 24 is "enhanced navigation" in the following statement that appears in paragraph 23 on pages 8 and 9 of the Office Action of June

6, 2007, in the Examiner's explanation of the rejection of original versions of claims 23 and 24 under 35 USC 112, second paragraph:

The term "ENAV" in claims 23 and 24 is used by the claim to mean "enhanced audio and video", while the accepted meaning is "enhanced navigation." See Tsumagari et al. US 20030161615 A1 (¶ 58). The term is indefinite because the specification does not clearly redefine the term.

Tsumagari was published on August 28, 2003, from Application No. 10/372,899 filed on February 26, 2003, claiming the benefit of Japanese Application No. 2002-49749 filed on February 26, 2002.

Furthermore, it is submitted that the meaning "enhanced navigation" of the term "ENAV" in claims 23 and 24 was known to one of ordinary skill in the ENAV art to which the invention of claims 23 and 24 pertains long before the filing date of October 17, 2002, of the earliest foreign priority application of the present application as evidenced by the following passage of J. Taylor et al., *DVD Demystified*, Third Edition, McGraw-Hill Professional, New York, January 31, 2006, ISBN 0071423966, p. 178, that was quoted by the applicants on page 6 of the Response to Requirement for Information Under 37 CFR 1.105 and was referred to by the Examiner in the explanation of the rejection:

WebDVD for the Rest of the World

In December 2000, the DVD Forum created a new ad-hoc group (AH1-12) chaired by InterActual Technologies to develop a specification for WebDVD. The idea was to have a single format for consumer DVD players as well as PCs so that there was more incentive for Hollywood studios and others to produce enhanced titles. Members of the ad-hoc group spent years developing what became known as the eNav specification (for enhanced navigation). The format uses XHTML, ECMAScript, and other Web-oriented technologies to add highly interactive control of the DVD-Video portion of discs. But, as the specification neared completion in mid 2003, the next-generation formats were coming to fruition. Many companies, particularly the studios, felt that it was better to wait and incorporate eNav into a single new high-definition format. Thus, eNav died, but from its ashes arose the interactive capabilities of the next-generation formats. Most of the advanced interactivity of HD DVD-Video and BD-J grew from work done on the eNav specification.

Thus, the ad-hoc group AH1-12 that developed the ENAV specification was created in December 2000, almost two years before the filing date of October 17, 2002, of the earliest foreign priority application of the present application. It is submitted that the members of this ad-hoc group were necessarily those of ordinary skill in the ENAV art to which the invention of claims 23 and 24 pertains because they were the ones who created the ENAV art in the first place. It is submitted that sometime during the time between the creation of the ad-hoc group in December 2000 and the filing of the earliest foreign priority application of the present application on October 17, 2002, those of ordinary skill in the ENAV art came to use the term "ENAV" in place of the term "enhanced navigation." Accordingly, it was not necessary to define the term "ENAV" in the foreign priority applications of the present application because those of ordinary skill in the art understood that this term means "enhanced navigation."

For at least the foregoing reasons, it is submitted that the meaning of "ENAV" in claims 23 and 24 is in fact clearly defined, such that claims 23 and 24 do in fact clearly define the metes and bounds of the claimed subject matter as required by 35 USC 112, second paragraph.

Conclusion—Claim Rejections Under 35 USC 112

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 19-24 under 35 USC 112, second paragraph, be withdrawn.

Claim Rejections Under 35 USC 101

Claims 19-22 have been rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. This rejection is respectfully traversed.

The Examiner states as follows on pages 14 and 15 of the Final Office Action of March 13, 2008:

The claims recite an apparatus for controlling a buffer, but the apparatus does not appear to include the buffer. It appears that the elements of the apparatus, specifically the buffer manager, can be implemented in software alone, making the claims software, per se. Even though the claim states that the manager is part of an apparatus, it appears that the recited elements of the apparatus can be implemented in software alone. Therefore, the claims are rejected as being directed toward non-statutory subject matter.

However, claims 19-22 explicitly recite an apparatus, which falls under the statutory category of "machine" set forth in 35 USC 101. Assuming *arguendo* that the elements of apparatus claims 19-22 can be implemented in software alone as conjectured by the Examiner, it is submitted that this does not somehow make claims 19-22 unpatentable under 35 USC 101 as being directed to non-statutory subject matter as alleged by the Examiner. It is submitted that nothing whatsoever in MPEP 2106 ("Patent Subject Matter Eligibility") (see MPEP pages 2100-5 through 2100-16) and MPEP 2106.1 ("Computer-Related Nonstatutory Subject Matter") (see MPEP pages 2100-17 and 2100-18) supports the position taken by the Examiner. Furthermore, it is submitted that nothing whatsoever in the Examiner's explanation of the rejection indicates that the Examiner has analyzed claims 19-22 in the manner required by MPEP 2106 and 2106.1. In any event it is submitted that the Examiner has not clearly communicated the findings, conclusions, and reasons which support his rejection of claims 19-22 under 35 USC 101 as being directed to non-statutory subject matter as required by MPEP 2106(VII) (see MPEP page 2100-15). Accordingly, it is submitted that the Examiner has not established a *prima facie* case of unpatentability under 35 USC 101.

Arguments similar to the above arguments were presented on pages 20 and 21 of the Amendment of September 5, 2007. In response to these arguments, the Examiner states as follows on page 4 of the Final Office Action of March 13, 2008:

Applicant's arguments regarding rejections under 35 U.S.C. 101 have been fully considered but they are not persuasive. For the reasons presented above and in the current rejections under 35 U.S.C. 112, second paragraph, and 35 U.S.C. 101, claims 19 – 22 are interpreted as including, if not limited to, embodiments that can be implemented in software alone, which prompted the rejection under 35 U.S.C. 101 for being software, per se. Hardware to execute the software is not recited.

However, the Examiner's explanation of the rejection of claims 19-22 under 35 USC 101 on pages 14 and 15 of the Final Office Action of March 13, 2008, is identical to the Examiner's explanation of this rejection on page 9 of the Office Action of June 6, 2007, to which the applicants already responded with the above arguments on pages 20 and 21 of the Amendment of September 5, 2007. However, the Examiner did not take notice of these arguments and answer the substance of them in the Final Office Action of March 13, 2008, as required by MPEP 707.07(f).

Furthermore, as discussed above in connection with the rejection under 35 USC 112, second paragraph, the Examiner has not identified anything whatsoever in the statutes, rules, MPEP, or case law to support his position that an apparatus claim that recites only elements that might arguably be implementable in either hardware or software is indefinite under 35 USC 112, second paragraph, because "it is not clear that the claimed subject matter can be accurately described as an apparatus."

Furthermore, the Examiner has not identified anything whatsoever in the statutes, rules, MPEP, or case law to support his position that an apparatus claim that recites only elements that might arguably be implementable in either hardware or software recites software *per se*, and is therefore directed to non-statutory subject matter under 35 USC 101. Should the Examiner be inclined to maintain this rejection in light of the above arguments, it is respectfully requested that the Examiner discuss this matter with his SPE, William Thomson, and identify some basis for the rejection under 35 USC 101 in the statutes, rules, MPEP, or case law in the next Office Action, even if that Office Action is an Advisory Action.

Furthermore, should the Examiner and his SPE decide to maintain the rejection despite the arguments set forth above, it is respectfully requested that the Examiner provide an example of a structural element, other than the buffer, that might be recited in the body of independent claim 19 to overcome the rejection in the next Office Action, even if that Office Action is an Advisory Action.

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 19-22 under 35 USC 101 as being directed to non-statutory subject matter be withdrawn.

Claim Rejections Under 35 USC 103

Rejections 1 and 2

Claims 1-14, 19-22, and 25-27 have been rejected under 35 USC 103(a) as being unpatentable over Landsman et al. (Landsman) (U.S. Patent No. 6,466,967) in view of Silberschatz, Avi, Peter Galvin and Greg Gagne (Silberschatz) ("Applied Operating System Concepts," First Edition, John Wiley & Sons, Inc., 2000, pp. 65-66 and 412-431), with the Examiner relying on the newly cited Goodman ("Danny Goodman's JavaScript® Handbook") and *American Heritage College Dictionary* references to support the rejection.

Claims 15-18 have been rejected under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as applied to claim 2 as supported by Goodman and the *American Heritage College Dictionary* reference, and further in view of Klug et al. (Klug) (U.S. Patent No. 5,996,007).

These rejections are respectfully traversed.

MPEP 706.02(j) provides as follows:

Where a reference is relied on to support a rejection, whether or not in a minor capacity, that reference should be positively included in the statement of the rejection. See *In re Hoch*, 428 F.2d 1341, 1342 n.3 166 USPQ 406, 407 n. 3 (CCPA 1970).

Accordingly, it is submitted that the Examiner was required to include the Goodman and *American Heritage College Dictionary* references in the statement of the rejection of claims 1-14, 19-22, and 25-27 under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz. Accordingly, should the Examiner repeat the rejection in the next Office Action, it is respectfully requested that the Examiner include the Goodman and *American Heritage College Dictionary* references in the statement of the rejection.

It is submitted that Landsman, Silberschatz, Goodman, the *American Heritage College Dictionary*, and Klug do not disclose or suggest "[a]n apparatus for reproducing audio video (AV) data using a markup document in an interactive mode selected by a user of the apparatus, comprising: a buffer to buffer the markup document to enable the apparatus to reproduce the AV data in the interactive mode selected by the user; and a buffer manager to manage the buffer to preload the markup document and output buffering state information of the buffer in response to a report signal, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user" as now recited in independent claim 1, or "[a]n apparatus for controlling a buffer to buffer a markup document to reproduce audio video (AV) data in an interactive mode selected by a user of the apparatus, the apparatus comprising: a buffer manager to manage the buffer to preload the markup document to enable the apparatus to reproduce the AV data in the interactive mode selected by the user, and output information of the buffer comprising buffering information of the markup document; wherein the buffering information is used by the apparatus in reproducing the AV data in the interactive mode selected by the user and comprises: information indicating that preloading of the markup document has

succeeded; information indicating that the preloading of the markup document has failed; and information indicating that the preloading of the markup document is still being conducted" as now recited in independent claim 19.

The Examiner considers column 9, lines 23-55; column 10, lines 5-31; and column 26, lines 43-49, of Landsman to disclose "a buffer which buffers the markup document" as previously recited in claim 1, and "a buffer which buffers a markup document to reproduce audio video (AV) data in an interactive mode" as previously recited in claim 19.

Column 10, lines 5-8, of Landsman discloses an HTML tag that is embedded into a referring page. This HTML tag contains a component that downloads a Java applet that in turn downloads advertising files (media and player files) and plays the files on an interstitial basis in response to a user click-stream, that is, when the user clicks a mouse to transition to a next successive content page. See column 10, lines 5-20 and 45-53, of Landsman. The other component is the web address of an advertising management system from which the advertising files are to be downloaded. See column 10, lines 20-23, of Landsman.

In paragraph 12 on page 5 of the Final Office Action of March 13, 2008, the Examiner states that "Landsman teaches the advertisements are presented based on a user's actions [col. 10 lines 17 – 20]," and that "[t]herefore, advertisements presented based on a user's actions teaches the claimed interactive mode," relying on the definition of "interactive" in the *American Heritage College Dictionary*, which is, *inter alia*, "[o]f or relating to a program that responds to user activity."

However, it is submitted that the alleged interactive mode disclosed in Landsman in which advertisements are presented based on a user's actions is not "an interactive mode selected by a user of the apparatus" as now recited in claims 1 and 19 because the user has no control over whether the advertisements will be presented based on his actions because this function is implemented solely by the HTML tag that is embedded into a referring page as described in column 10, lines 5-8, of Landsman without any participation whatsoever by the user. In fact, until the first advertising file is reproduced when the user clicks a mouse to transition to a next successive content page, the user will not even be aware that any advertising files have been downloaded because this process is transparent to the user as described in column 10, lines 13-18 and 40-45, of Landsman.

For at least the foregoing reasons, it is respectfully requested that the rejection of claims 1-14, 19-22, and 25-27 (i.e., claims 1 and 19 discussed above and claims 2-14, 20-22, and 25-27 depending therefrom) under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as supported by Goodman and the *American Heritage College Dictionary* reference, and the rejection of claims 15-18 (which depend from claims 1 and 19 discussed above) under 35 USC 103(a) as being unpatentable over Landsman in view of Silberschatz as applied to claim 2 as supported by Goodman and the *American Heritage College Dictionary* reference, and further in view of Klug, be withdrawn.

Rejections 3 and 4

Claim 23 has been rejected under 35 USC 103(a) as being unpatentable over Kanazawa et al. (Kanazawa) (U.S. Patent No. 6,580,870) in view of Sullivan.

Claim 24 has been rejected under 35 USC 103(a) as being unpatentable over Kanazawa in view of Sullivan as applied to claim 23, and further in view of Silberschatz.

These rejections are respectfully traversed.

It is submitted that Kanazawa, Sullivan, and Silberschatz do not disclose or suggest "[a]n apparatus for recording and/or reproducing audio video (AV) data using a markup document in an interactive mode selected by a user of the apparatus before the apparatus reproduces any of the AV data, comprising: an AV buffer to buffer the AV data; an AV reproduction engine to decode the AV data; an enhanced navigation (ENAV) buffer to preload the markup document before the apparatus reproduces any of the AV data to enable the apparatus to reproduce the AV data in the interactive mode selected by the user; an ENAV engine to identify buffering state information of the markup document and decode the markup document, the buffering state information being used by the apparatus in reproducing the AV data in the interactive mode selected by the user; and an I/O manager to obtain the markup document" as now recited in independent claim 23.

The Examiner has relied on the apparatus shown in FIG. 16 of Kanazawa which displays a Web link button while reproducing DVD video showing a car as shown in FIG. 19A of Kanazawa. If the user clicks on the Web link button, the apparatus displays HTML contents providing information about the car as shown in FIG. 19B of Kanazawa. Assuming *arguendo*

that the mode shown in FIGS. 19A and 19B may be considered to an interactive mode selected by a user of the apparatus as recited in claim 23, it is submitted that this interactive mode is not selected by the user before the apparatus reproduces any of the AV data as recited in claim 23 because the apparatus in FIG. 16 is already reproducing DVD video as shown in FIG. 19A before the user clicks on the Web link button.

The Examiner states as follows with respect to Sullivan in paragraph 67 on pages 22 and 23 of the Final Office Action of March 13, 2008:

Kanazawa fails to specifically teach an ENAV buffer which preloads the markup document as claimed. However, Sullivan teaches an enhanced navigation (ENAV) buffer which preloads the markup document to reproduce the AV data in the interactive mode; and an ENAV engine which identifies buffering state information of the markup document and decodes the markup document [p. 75 ¶ 1 – 2; p. 78 ¶ 1 – 3; p. 95 ¶ 1 – p. 96 ¶ 4; p. 97 last ¶; p. 177 last ¶; p. 33 ¶ 2; p. 45 ¶ 2]. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these teachings because Kanazawa teaches downloading web content in a multimedia environment and Sullivan teaches details of the types of web content and how the content is delivered and presented.

However, it is submitted that Sullivan does not disclose "an ENAV buffer" and "an ENAV engine" as recited in claim 23 as the term "ENAV" would be understood by one of ordinary skill in the ENAV art. Furthermore, the Examiner has not identified where Sullivan discloses "an interactive mode" as recited in claim 23.

Page 75 of Sullivan discloses a Java applet known as VideoApplet that plays a video file. Page 78 of Sullivan discloses an applet known as ScriptableMediaApplet that plays a video file, and is designed to be scriptable by JavaScript. Both VideoApplet and ScriptableMediaApplet have a parameter "controlpanel" that determines whether or not a VCR control panel should be displayed. Page 79 of Sullivan states that "[o]n a web page, it is easy to add HTML FORM buttons that start and stop the video." Assuming *arguendo* that these portions of Sullivan may be considered to disclose "an interactive mode" as recited in claim 23, it is submitted that this interactive mode is not "an interactive mode selected by a user of the apparatus before the apparatus reproduces any of the AV data" as now recited in claim 23 because a user of the apparatus has no control over whether the VCR control panel is displayed or the HTML FORM

buttons that start and stop the video are provided. Rather, this decision is made by the programmer.

Pages 33, 45, 75, 78, 95-97, and 177 of Sullivan relied on by the Examiner explain how a programmer can write code to download and play a video file, and explains how the code accomplishes this. However, a user of the code does not select an interactive mode. Any such selection is made by the programmer.

For at least the foregoing reasons, it is respectfully requested that the rejection of 23 (which discussed above) under 35 USC 103(a) as being unpatentable over Kanazawa in view of Sullivan, and the rejection of claim 24 (which depends from claim 23 discussed above) under 35 USC 103(a) as being unpatentable over Kanazawa in view of Sullivan as applied to claim 23, and further in view of Silberschatz, be withdrawn.

Patentability of New Claim 28

It is submitted that Landsman, Silberschatz, Goodman, the *American Heritage College Dictionary* reference, Klug, Kanazawa, and the claims of copending Application Nos. 10/685,694, 10/685,696, 10/685,697, 10/685,699, and 10/686,537 do not disclose or suggest the features "the interactive mode is a mode in which the AV data is displayed in a display window defined by the markup document; the apparatus is selectively operable in the interactive mode in which the AV data is displayed in the display window defined by the markup document, and a non-interactive video mode in which the AV data is displayed in the same manner as AV data recorded on a standard DVD; and the user of the apparatus selects between the interactive mode and the non-interactive video mode" recited in new dependent claim 10.

For at least the foregoing reasons, it is submitted that new claim 28 is patentable over Landsman, Silberschatz, Goodman, the *American Heritage College Dictionary* reference, Klug, Kanazawa, and the claims of copending Application Nos. 10/685,694, 10/685,696, 10/685,697, 10/685,699, and 10/686,537, and an indication to that effect is respectfully requested.

Conclusion

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this paper, please charge the same to our Deposit Account No. 503333.

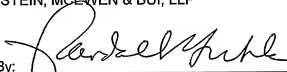
Respectfully submitted,

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Attachments